

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

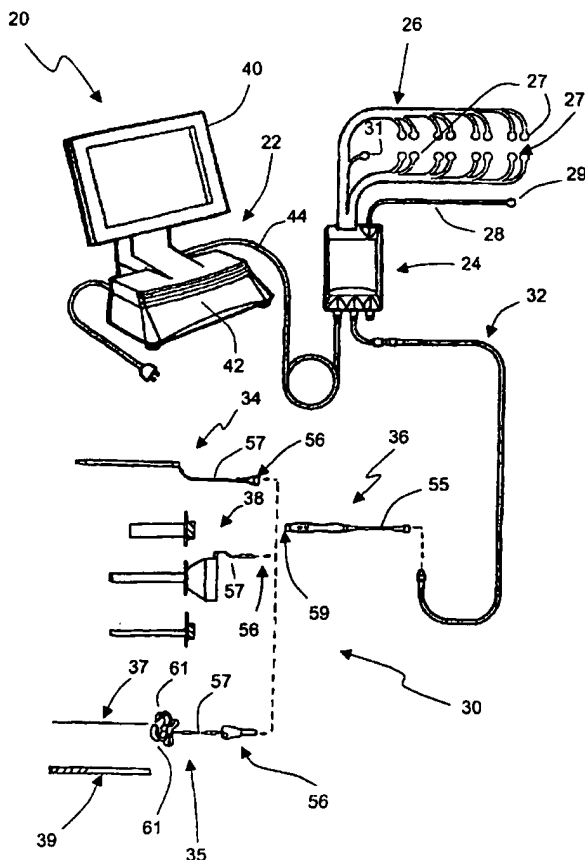
PCT

(10) International Publication Number
WO 2005/013805 A3

- (51) International Patent Classification⁷: **A61B 5/04** (72) Inventor: **BLEWETT, Jeffrey** (deceased).
- (21) International Application Number: **PCT/US2004/025550** (72) Inventors; and
- (22) International Filing Date: **5 August 2004 (05.08.2004)** (75) Inventors/Applicants (for US only): **MILES, Patrick** [US/US]; 5227 Greenwillow Lane, San Diego, CA 92130 (US). **MARTINELLI, Scot** [US/US]; 9624 Paseo Mont-
tril, San Diego, CA 92129 (US). **ARAMBULA, Jared** [US/US]; 10065 Old Grove Road, San Diego, CA 92131 (US). **GHARIB, James** [US/US]; 10918 Derrydown Way, San Diego, CA 92130 (US). **FARQUHAR, Allen** [US/US]; 6220 Hannon Court, San Diego, CA 92117 (US). **KAULA, Norbert** [GE/US]; 8258 West 72nd Avenue, Arvada, CO 80005 (US).
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/493,024 5 August 2003 (05.08.2003) US
60/540,083 28 January 2004 (28.01.2004) US
- (71) Applicant (for all designated States except US): **NUVASIVE, INC.** [US/US]; 10065 Old Grove Road, San Diego, CA 92131 (US).
- (71) Applicant (for US only): **MEDEIROS, Goretti** (legal representative of the deceased inventor) [US/US]; 86 Parkview Drive, Plantsville, CT 06479 (US).
- (74) Agent: **SPANGLER, Jonathan**; NuVasive Inc., 10065 Old Grove Road, San Diego, CA 92131 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

[Continued on next page]

(54) Title: **SYSTEM AND METHODS FOR PERFORMING DYNAMIC PEDICLE INTEGRITY ASSESSMENTS**



(57) Abstract: The present invention involves systems (20) and related methods for performing dynamic pedicle integrity assessments involving the use of neurophysiology.



KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) **Date of publication of the international search report:**

28 July 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/25550

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/04

US CL : 600/546

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/546,544,554,300

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,474,558 A (Neubardt) 12 December 1995 (12.12.1995), column 6, line 3 - column 7, line 17.	1 - 4 and 7
A	US 2002/0072686 A1 (Hoey et al.) 13 June 2002 (13.06.2002), [0039] - [0040].	1-14

☐

Further documents are listed in the continuation of Box C.

☐

See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

22 February 2005 (22.02.2005)

Date of mailing of the international search report

03 JUN 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Max Hindenburg

Telephone No. (703) 308-0858